

REMARKS

In a telephone conversation on July 8, 2005, a provisional election to prosecute the invention of Group I, claims 1-8 was made. Applicant affirms this election.

Claims 1-8 and new claims 27 and 28 remain for the Examiner's further consideration. Claims 9-26 are withdrawn.

Claims 1, 2, 4 and 6-7 were rejected as unpatentable over Gatti (4,668,177) in view of Martell et al. (4,955,804). Reconsideration of this rejection is respectfully requested.

Claim 1 calls for an injection blow molding machine having a turret with at least three planar faces, each face carrying at least one hollow core rod. The turret is rotated to present each face, successively, at a plurality of stations to form, at one of the stations, a preform on the one core rod at the said one of the stations, and then to form, at a successive one of the stations, a blown article from the preform, and apparatus for cooling the core rod at said one of the stations. Such apparatus comprises a source of compressed air, means for conditioning compressed air from the source, and means for circulating conditioned compressed air from the means for conditioning compressed air through the at least one core rod at the said one of the stations. Claim 1 has been amended to call for means for blocking circulation of compressed air from the means for

conditioning compressed air through the at least one core rod at the successive one of the stations.

Regarding Gatti, the Examiner states, and applicant agrees, that Gatti "does not teach a source of compressed air and means to cool (condition) said compressed air using a pressure regulated means."

Martell et al. is relied upon to provide this deficiency of Gatti. However, Martell et al. discloses a tool for molding plastic articles in a mold space 44. Molten plastic is fed to the mold space 44 by a feeder tube having a main body 26. The space surrounding the main body 26 of the feeder tube receives air from a compressor 54. The air is cooled by an air chiller 58 controlled by controls 86, 88 to vary the temperature. However, Martell et al. does not relate to equipment for the injection molding of annular parisons (see the Martell et al. mold space 44) and therefore would not suggest a technique for cooling a "core rod" of the type used in the machine of Gatti.

The amended claim 1 also now calls for means for blocking circulation of compressed air from the means for conditioning the compressed air through the at least one core rod at the successive one of the stations. Neither Gatti nor Martell et al. even remotely suggests these added limitations, and accordingly, claim 1 is believed to patentably distinguish from any combination of Gatti and Martell et al.

Claim 1 was also rejected as unpatentable over Farrell (3,998,577) in view of Martell et al. Reconsideration of this rejection is respectfully requested.

Regarding Farrell, the Examiner states, and applicant agrees, that Farrell "does not teach a source of compressed air and means to cool (condition) said compressed air using a pressure regulated means."

Martell et al. is relied upon to provide this deficiency of Farrell. However, Martell et al. does not relate to equipment for the injection molding of annular parisons and therefore would not suggest a technique for cooling a "core rod" of the type used in the machine of Farrell.

The amended claim 1 also now calls for means for blocking circulation of compressed air through the at least one core rod at the successive one of the stations. Neither Farrell nor Martell et al. suggests these added limitations, and accordingly, claim 1 is believed to patentably distinguish from any combination of Farrell and Martell et al.

Claim 2 is dependent on claim 1 and is believed to be allowable along with claim 1. Claim 2 adds that the means for conditioning comprises pressure regulating means for regulating pressure of the compressed air. Although Martell et al. discloses a compressor for providing a pressure regulated supply of compressed air, it is submitted that Martell et al. does not relate to equipment for the injection molding of annular parisons and therefore would not suggest a technique for cooling a "core rod" of the type used in the machine of Farrell.

Claim 3 was rejected as unpatentable over Gatti in view of Martell et al. and in further view of Ryder (4,152,383). Reconsideration of this rejection is respectfully requested.

Claim 3 is dependent on claim 1 and is believed to be allowable along with claim 1. Claim 3 adds that the means for conditioning comprises heater means for heating the compressed air. Ryder was cited with respect to this added limitation. In Ryder, cold air blows the hot plastic preform outwardly to form a hollow article, after which a torch reheats the core rod for the next cycle. This is altogether different from applicant's machine wherein the heater 25 shown in FIG. 1 is used to condition the compressed air circulated through the core rod as part of the apparatus for cooling the core rod.

Claim 4 is dependent on claim 1 and is believed to be allowable along with claim 1. Claim 4 adds that the means for conditioning comprises cooler means for cooling the compressed air. Although Martell et al. discloses an air chiller 58 for lowering the temperature of the air supplied to the space 50 around the tube body 26, it is submitted that Martell et al. does not relate to equipment for the injection molding of annular parisons and therefore would not suggest a technique for cooling a "core rod" of the type used in the machines of Gatti and Farrell.

Claim 5 is dependent on claim 4 and is believed to be allowable along with claims 1 and 4. Claim 5 adds that the cooler means comprises means

for injecting a water spray into the compressed air. Rosenkranz et al. (4,076,071) was cited with respect to this added limitation. In Rosenkranz et al. the blank 9 is cooled by a cooling medium that is applied directly upon the outer surface of the blank. This is very different from injecting a water spray into compressed air circulated through a core rod, as claimed in claim 5.

Claim 6 is dependent on claim 1 and states that the means for circulating compressed air comprises means for exhausting compressed air from the at least one core rod at the said one of the stations. Claim 7 is dependent on claim 6 and adds that the means for exhausting comprises means for discharging compressed air from the core rod to the atmosphere. Claims 6 and 7 are believed to be allowable along with claim 1. Although Martell et al. discloses exhausting the cooling air it is not clear that the exhausted air goes to atmosphere. In any event, it is submitted that Martell et al. does not relate to equipment for the injection molding of annular parisons and therefore would not suggest a technique for exhausting air from a "core rod" of the type used in either Gatti or Farrell.

Claim 8 is dependent on claim 6 and is believed to be allowable along with claims 1 and 6. Claim 8 adds that the means for exhausting comprises means for compressing compressed air exhausted from the at least one core rod and returning the compressed air exhausted from the core rod to the means for circulating compressed air for conditioning by the means for conditioning to return the compressed air exhausted from the core rod to the core rod. Gasmire

(3,065,501) was cited with respect to this added limitation. Whereas, in Gasmire the reclaim unit 75 puts out compressed CO₂, there is no compression of exhausted air before it is returned for recirculation. In applicant's apparatus, on the other hand, the exhausted air is compressed by a compressor 46 before it is returned to line 20 for recycling. Thus applicant's apparatus is quite different from that of Gasmire.

Claim 27 depends from claim 1 and adds that the means for blocking circulation of compressed air includes a switch operated by a cam rotatable with the turret. See applicant's FIG. 6. Nothing similar to the added limitations in claim 27 is shown in the prior art of record. Accordingly, claim 27 is believed to be allowable.

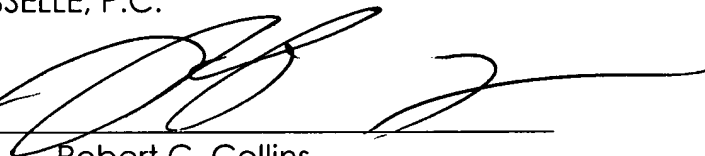
Claim 28 depends from claim 8 and adds that the means for blocking circulation of compressed air does so by blocking the exhaust of spent conditioned air from the successive one of the stations. Nothing similar to this is shown in the prior art of record and accordingly claim 28 is believed to be allowable.

In view of the foregoing, this application is now believed to be in condition for allowance and such action is respectfully requested.

Please charge any fees associated with this submission to Account No.
15-0875 (Owens-Illinois).

Respectfully submitted,

REISING, ETHINGTON, BARNES,
KISSELLE, P.C.

By 

Robert C. Collins
Reg. No. 27,430
Telephone (248) 689-3500
Facsimile (248) 689-4071